

Agency: Commerce, Community and Economic Development**Grants to Named Recipients (AS 37.05.316)****Grant Recipient: Copper Valley Electric Association****Federal Tax ID: 92-0023631****Project Title:**

Copper Valley Electric Association - Allison Lake Hydro Development License Application

State Funding Requested: \$ 1,000,000**House District: 12 - F**

One-Time Need

Brief Project Description:

Necessary work to fulfill requirements for FERC license application to development hydro electric project at Allison Lake

Funding Plan:**Total Cost of Project: \$1,000,000**Funding Secured

Amount FY

Other Pending Requests

Amount FY

Anticipated Future Need

Amount FY

There is no other funding needed

Detailed Project Description and Justification:

CVEA is looking toward the future with a focus on reliability projects at minimal cost to the customer and toward investigating opportunities to reduce the cost of power while decreasing reliance on fossil fuels to generate electricity. While CVEA is fortunate to have the Solomon Gulch Hydroelectric facility, the utility remains dependent upon fossil fuel plants for 40% of annual generation requirements.

Following completion of several studies in the past year, on March 3, 2008, CVEA filed an application for a preliminary permit to develop the hydroelectric potential of Allison Lake (near Valdez). The permit, which CVEA expects to be awarded in June 2008, is for a three-year period. During the term of the permit CVEA will conduct environmental studies (fisheries, terrestrial, cultural, recreation, etc.) work with state and federal agencies (and other stakeholders) and perform engineering work necessary to fulfill the requirements of a FERC license application. The estimated cost to prepare a bonafide license application is approximately \$1 million.

Project Timeline:

three-year period

Entity Responsible for the Ongoing Operation and Maintenance of this Project:

Copper Valley Electric Association

Grant Recipient Contact Information:

Contact Name: Robert Wilkinson

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Valdez, AK 99686-0927

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Has this project been through a public review process at the local level and is it a community priority? ☒ Yes ☐ No

Talking Points in Support of CVEA 2008 Request for Appropriation

About CVEA

CVEA serves 8,000 residents in Valdez and the rural Copper River Basin. The Cooperative generates power from three sources (Hydro-60%; Cogeneration-25% and Diesel-15%). The average revenue per residential kilowatt-hour in 2007 was 28.5¢ and 25.8¢ in Copper Basin and Valdez, respectively. CVEA customers do not receive power cost equalization. CVEA is a stand-alone utility in that we are not connected electrically to the Railbelt grid or to any other utility.

Power Supply Planning

Power supply planning is an ongoing process at CVEA.

Current Needs – CVEA's current power supply needs includes completion of an upgrade to our Glennallen Diesel Plant (GDP) and the replacement of a key piece of electric equipment in the Valdez Diesel Plant substation. Those projects are further explained below.

- GDP Upgrade \$2,000,000

CVEA operates four power plants; three in Valdez and one in Glennallen. The communities are connected by road and a 138 KV transmission line owned by the Four Dam Pool. The t-line is vulnerable to prolonged outage caused by weather and avalanche (six events since 1986, once as long as nine months). When the t-line is out of service, the GDP must serve the electric load in the Copper Basin. Prime generation in GDP was installed in 1975-76. The GDP upgrade will install a new state of the art, more efficient diesel generator set in the Glennallen Plant.

The total cost of the project is \$3.9 million. In 2003 CVEA was awarded a \$1.9 million matching grant by the federal Department of Energy to construct additional generation in the Glennallen Diesel Plant. The DOE grant requires matching funding from a non federal source. If the state appropriation is obtained, this project can be completed at no cost to the members.

- VDP Transformer \$500,000

The 10 MVA power transformer at the Valdez Diesel Plant Substation provides voltage transformation from the 24.94 kV provided by the Solomon Gulch circuit to the downtown 12.47 kV distribution system. This transformer is one of CVEA's most critical assets. An extensive maintenance program dictates this vital piece of equipment should be replaced. No other utility in the state has a spare to match the capacity needed for our application. A new unit can be available for delivery in 46 to 52 weeks after receipt of an order at a cost of approximately \$500,000.

Future Needs - As we look toward the future our focus is on successful completion of the above mentioned reliability projects at minimal cost to the customer and on investigating opportunities to reduce the cost of power by decreasing our reliance on fossil fuels to generate electricity.

While CVEA is fortunate to have the Solomon Gulch Hydroelectric facility in our power supply portfolio, we remain dependent on fossil fuel plants for 40% of our annual generating requirement.

- Allison Lake License Application \$1,000,000

Following completion of several studies in the past year, on March 3, 2008, CVEA filed an application for a preliminary permit to develop the hydroelectric potential of Allison Lake (near Valdez). The permit, which CVEA expects to be awarded in June, is for a three-year period. During the term of the permit CVEA will conduct environmental studies (fisheries, terrestrial, cultural, recreation), work with state and federal agencies (and other stakeholders) and perform engineering work necessary to fulfill the requirements of a FERC license application. The estimated cost to prepare a bonafide license application is \$1 million.

Other Capital Projects

- F421 Circuit Split to the Hub \$500,000

Currently one feeder from the Glennallen Substation serves the majority of the Copper Basin from Copper Center north to MLR1 and the HAARP site. Load growth has increased on this feeder to the point where a new feeder has been justified. The project will involve conversion of the Solomon feeder to a double circuit and a new circuit from where the Solomon circuit crosses the Glenn Highway to the intersection of the Glenn and Richardson Highways.

- Lake Louise Road Line Extension \$1,200,000

This line extension would extend a single-phase distribution line 9.5 miles down the Lake Louise Road or approximately half way to the lake. This would enable CVTC and AT&T communication sites to obtain electric service.

- Tiekel River Line Extension \$700,000

This line extension would be six miles in length and would serve an estimated six new customers including one lodge and an Alyeska remote gate valve site.

- Other Projects

CVEA has identified numerous line extension projects which, if funding were available, could add a significant number of customers to CVEA's system. Many of these projects cannot otherwise be afforded without some financial assistance.

Copper Valley Electric Association, Inc.
For Immediate Release
March 5, 2008

CVEA Files for Preliminary Permit on Allison Lake

On March 3, CVEA filed an application for a preliminary permit with the Federal Energy Regulatory Commission (FERC) to undertake an Allison Lake Hydroelectric Project. For CVEA the project holds the potential for increased hydro power generation which could displace over 20,000 MWH of fossil fuel generation and provide members of the Cooperative long-term, sustainable, environmentally clean energy.

Allison Lake has been studied as a potential source of hydroelectric power since the 1980s. The Allison Lake drainage, which sits west of the Solomon Gulch hydroelectric project, has long been seen as a promising location for hydro power development. Since 2004, soaring oil prices have dramatically raised the cost of electricity in Valdez and the Copper River Valley which has led CVEA to look at potential alternatives for power generation. In 2006, CVEA prepared a reconnaissance level study of power supply alternatives. This study, titled the *Alternative Generation Review*, evaluated the potential for geothermal, fuel cells, solar, wind, coal, and hydro via Allison or Silver Lake. The study recommended Allison Lake be further evaluated.

In 2007, CVEA completed a pre-feasibility study of Allison Lake alternatives. As part of the study, previous reports prepared by the Army Corps of Engineers and HDR Engineers were reviewed and a field reconnaissance site visit was conducted. The pre-feasibility study identifies three potential alternatives for using Allison Lake water to generate electricity. The alternatives include a tunnel option to divert Allison water to Solomon Gulch and two standalone options to move Allison water to a new power house near tidewater.

The conclusions of the study indicate that each of the three alternatives appears to be technically feasible and each appears to deliver power to CVEA at less than the current cost of fossil fuel generation, assuming the project is commercially financed. Grants or other attractive financing products would enhance the economics of each of the three alternatives. The recommendation of the study was to proceed with the initial steps toward licensing a hydropower project at Allison Lake.

CVEA's application to FERC for the preliminary permit immediately follows the expiration of the permit recently held by Green Power Development, which expired on February 29, 2008. The purpose of a preliminary permit is to secure and maintain priority to allow CVEA to study the power potential of Allison Lake and to develop information necessary to support a license application. The term of the requested permit is three years. During this time, CVEA will study the potential regulatory and environmental considerations associated with developments of this type.

Jim Manning, Board President, said the Board of Directors has been working toward this announcement since early 2007 and that the Board looks forward to discussing the potential Allison Lake has for the Cooperative's membership.

The application for the preliminary permit is available for inspection and reproduction during regular business hours at both CVEA offices and at the public libraries in Valdez and Glennallen.

For more information concerning this news release or other CVEA business, please contact Sharon Crisp, Director of Communications at 835-7005 or crisp@cvea.org